In the Supreme Court
OF THE
United States

October Term, 1950

No. 940

Ernest Ritt Company, a copartnership consisting of M. C. Ernest and M. B. Chandler,

Petitioners,

vs.

Rapids Tool Machinery Co., Inc., a corporation, and Ralph R. Reynolds, an individual,

Respondents.

PETITION FOR WRIT OF CERTIORARI to the United States Court of Appeals for the Ninth Circuit.

Louis E. Hoisel,

Counsel for the Petitioners.

Dec. 1950

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In the Supreme Court
OF THE
United States

OCTOBER TERM, 1958

No.

ELRICK RIM COMPANY, a copartnership consisting of M. C. ELRICK and M. B. CHAMPLIN,
Petitioner,

vs.

READING TIRE MACHINERY CO., INC., a corporation, and RALPH R. READING, an individual,
Respondents.

PETITION FOR WRIT OF CERTIORARI to the United States Court of Appeals for the Ninth Circuit.

PETITION FOR WRIT OF CERTIORARI.

Your petitioner, Elrick Rim Company, respectfully prays that a Writ of Certiorari issue to the Court of Appeals for the Ninth Circuit to review the Judgment of that Court holding valid and infringed claims 1, 2, 3 and 4 of United States Letters Patent No. 2,721,148. A certified

copy of the record, including all proceedings in the Court of Appeals for the Ninth Circuit is furnished herewith in compliance with Rule 31, Subdivision 2, of the Rules of this Court.

JURISDICTION OF THE COURTS BELOW.

This suit was commenced in the United States District Court by the filing of a complaint under the provisions of the Declaratory Judgment Act, 28 U. S. Code, Sec. 2201. The jurisdiction of the Court of Appeals for the Ninth Circuit was founded on 28 U. S. Code, Sec. 1291.

OPINION OF THE COURT BELOW.

Copies of the opinion (R. 874) of the Court of Appeals for the Ninth Circuit and the Judgment (R. 888) upon which review is respectfully sought are appended in the Appendix to this petition. The opinion is reported at 120 U.S.P.Q. 514, but at the time of preparation of this petition had not been reported in the Federal Reporter.

CONCISE STATEMENT OF GROUNDS UPON WHICH THE JURISDICTION OF THIS COURT IS INVOKED.

The grounds on which jurisdiction is invoked is that the Court of Appeals for the Ninth Circuit, by its Judgment, has decided important questions of settled law in a way in conflict with applicable decisions of this Court and Courts of Appeals of other circuits and has erro-

neously construed and applied a statute of the United States, to wit, 35 U. S. Code, Sec. 112.

The Judgment of the Court of Appeals for the Ninth Circuit sought to be reviewed was entered on March 4, 1959. A petition for rehearing was filed on March 26, 1959, and said petition was denied by the Court of Appeals for the Ninth Circuit on April 6, 1959. This petition is filed in this Court within ninety days following the denial of said petition for rehearing.

The statute confirming jurisdiction on this Court is 28 U. S. Code, Sec. 1254.

QUESTIONS PRESENTED.

1. Should a Court of Appeals be permitted to ignore a doctrine of this Court wherein the interpretation and application of a statute of the United States is settled?

2. Where the claims of a patent are free from ambiguity but overclaim the invention to the point of invalidity, is a Court justified in referring to the specifications of the patent to limit and thus validate said claims when the doctrine expressed by this Court in *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 336 U.S. 271, 69 S. Ct. 535, clearly prohibits such reference?

STATUTE TO BE CONSTRUED.

The Statute to be construed is 35 U. S. Code, Sec. 112, as follows:

> "The specification shall contain a written description of the invention, and of the manner and process

of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof."

The pertinent portion of this Statute here involved is:

"The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention."

CONCISE STATEMENT OF THE CASE.

This suit originated under the Declaratory Judgments Act, 28 U. S. Code, Sec. 2201, wherein petitioner, after receiving a notice of infringement (R. 863), sought a declaration that Letters Patent No. 2,721,148 was invalid and not infringed. The District Court adjudged the four claims of the patent in suit to be valid and infringed, and this Judgment was affirmed on appeal to the Court of Appeals for the Ninth Circuit. This petition seeks a re-

view of the Judgment affirming the Judgment of the District Court that claims 1, 2, 3 and 4 of Patent No. 2,721,148 are valid as a matter of law.

Patent No. 2,721,148 is concerned with a method of spray painting rubber cement on tire carcasses during the retreading of tires. The purpose of spraying rubber cement on the tire carcasses is so the rubber cement will act as an adhesive to hold the camelback or treadstock in place during the succeeding steps of retreading. The prior method of applying rubber cement to a tire carcass was to paint it on with a paint brush. The spray painting method of applying rubber cement on tire carcasses has been universally adopted in the tire retreading industry. Industry statistics for the year 1958 establish that there were approximately thirty-seven million tires retreaded during that year in the United States.

The basis of contending that the claims of said Patent No. 2,721,148 are invalid is that said claims are fatally indefinite under the doctrine of *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 336 U.S. 271, 69 S. Ct. 535, wherein this Court stated that where claims were free from ambiguity and overclaimed the invention to the point of invalidity, it was improper to refer to the specification to limit the claims for the purpose of validating said claims.

In the use of the ordinary spray gun with a pressure pot, there is employed an independent air line connected to one inlet of the gun whereby air under pressure is fed thereto. There is also a fluid line connected to the other inlet of the gun whereby fluid under pressure is fed to

the gun. The gun functions to atomize and spray the air and cement onto a surface.

The Court of Appeals for the Ninth Circuit held that one of the novel features of the process of Patent No. 2,721,148, that differentiated this process from the prior art, was the use of from 160 to 200 pounds per square inch pressure in the independent air line leading directly to the spray gun. The Court of Appeals for the Ninth Circuit throughout its opinion stressed this novel feature of the process. Yet the claims of said patent fail to include any limitation of such pressures in the independent air line. Claim 1 calls only for "forming an independent stream of air" while claims 2, 3 and 4 call only for "a source of air under superatmospheric pressure." The language of the claims is understandable and free from ambiguity. Yet the range of pressure of the independent stream of air, included in each of the claims, is greatly in excess of the actual invention disclosed and covered by said patent.

This contention was clearly brought out by petitioner in the Court below, both on the original hearing and on the petition for rehearing. Yet the Court of Appeals for the Ninth Circuit ruled as follows:

> "Appellant challenges the legal sufficiency of the specific claims set out in Reading's patent. In our view, however, the stated claims of the patent read in the light of the patent specifications are legally sufficient within the meaning of 35 U.S.C.A. § 112." (R. 885, Appendix page 12.)

This ruling was made in complete disregard of the doctrine expressed by this Court in *Graver Tank & Mfg. Co.*

v. Linde Air Products Co., supra, and has the effect of forcing millions of purchasers of retreaded tires, in the United States, to pay tribute to said Patent No. 2,721,148.

REASONS RELIED UPON FOR THE ALLOWANCE OF WRIT OF CERTIORARI.

1. The Court of Appeals for the Ninth Circuit should not be permitted to ignore a settled doctrine of this Court wherein a Statute of the United States is interpreted and applied.

2. The Court of Appeals for the Ninth Circuit, in ruling claims 1, 2, 3 and 4 of United States Letters Patent No. 2,721,148 valid, by permitting reference to the specifications to limit said claims, made a ruling with respect to 35 U. S. Code, Sec. 112 (the pertinent language of the present statute here involved, is identical with the language of the prior statute 35 U. S. Code, Sec. 33), in conflict with the doctrine expressed by this Court in *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, supra.

3. The language of the claims of Patent No. 2,721,148 is free from ambiguity; the said claims overclaim the invention to the point of invalidity and they should not be saved by reference to the specification for a proper definition of the invention.

4. The claims of the patent in suit do not define the metes and bounds of the invention, and thus deprive the public of being clearly informed "during the life of the patent of the limits of the monopoly asserted, so that it may be known which features may be safely used without a license and which may not." (Quoting from *United*

Carbon Co. v. Binney & Smith Co., 317 U.S. 228, 63 S. Ct. 165.)

5. Issues of great moment to the public are involved in that the process covered by the claims of United States Letters Patent No. 2,721,148 is employed in the retreading a large percentage of truck and passenger car tires in the United States, and as a result thereof each person who purchases a retreaded tire for use on a vehicle will pay tribute to this patent if the validity of the claims thereof is sustained.

ARGUMENT.

CLAIMS 1, 2, 3 AND 4 OF PATENT NO. 2,721,148 ARE FATALLY INDEFINITE UNDER THE DOCTRINE OF GRAVER TANK & MFG. CO. v. LINDE AIR PRODUCTS CO., 336 U. S. 721, 69 S. CT. 535, AND 35 U.S. CODE, SEC. 112, AND THE JUDGMENT HOLDING THE CLAIMS TO BE VALID IS IN DIRECT CONFLICT WITH SAID CASE AND STATUTE.

The said Patent No. 2,721,148 covers a process of spraying rubber cement wherein there is fed to the ordinary spray gun an independent stream of air under a pressure of from 150 to 200 pounds per square inch and a stream of emulsified rubber cement. The spray gun functions to atomize and spray the air and cement.

The Court of Appeals for the Ninth Circuit admitted that the prior art discloses spray devices that can be utilized to practice the process of the patent here in suit, stating:

> "There are at least three paint-spraying devices, patented prior to Reading, which with certain adjustments or minor changes could have been utilized to carry out the Reading process. One of these is the Shelburne apparatus, patent No. 1,710,435. Another

is the Gradolph device, patent No. 1,318,863. The third is the McLean sprayer, patent No. 1,395,965. These three patents claim devices and not methods. In each case the principal purpose of such device is to spray paint, but other liquids are also mentioned." (R. 878; Appendix p. 5.)

The only difference between the process resulting from the use of the device of either of the patents to Shelburne, Gradolph or McLean is the use of an excessive air pressure in the independent air line of 150 to 200 pounds per square inch and the formation of an emulsion of air and cement.

The Court of Appeals for the Ninth Circuit and the District Court stressed the fact that an excessive pressure in the independent stream of air of from 150 to 200 pounds per square inch was an important and novel part of the patented process. The Court of Appeals in its opinion said:

"The high pressure in the independent air line, as taught by Reading, reaches a magnitude of from one hundred fifty to two hundred pounds per square inch. This makes possible the application of an exceedingly thin coating of rubber cement which dries quickly, thereby saving time and avoiding the dust, moisture, and health hazards associated with former methods. The utilization of high air pressure in the bypass line also aids in overcoming the 'cobwebbing' effect to which reference has been made. In addition the high air pressure utilized in the Reading process causes the mixture to attain and retain an air volume above the flammable limits of the solvent. The need of extreme care to avoid the danger of fire or explosion is thus overcome." (R. 877; Appendix p. 4.)

• • • • • • •

"In paint spraying the application of air pressure in the independent air line in the 150 to 200-pound range is unnecessary and in fact undesirable. Likewise, there is no advantage in obtaining an emulsion effect where paint is to be sprayed. *In these two particulars Reading teaches a process not contemplated by Shelburne, Gradolph or McLean.*" (R. 878; Appendix p. 5.) (Italics ours.)

• • • • • • • •

"The trial court concluded that the use which Reading made of the known paint spraying devices was not analogous to the uses for which they were originally designed. The Court based this conclusion on its findings of fact *that Reading was the first to use excess air pressure in the independent air line* and to obtain emulsion within the tank of liquid, both of these techniques being undesirable in the case of spray painting. In our view these two variances are sufficient to warrant the conclusion that Reading teaches a nonanalogous art and is therefore a 'new' use of a known machine within the meaning of § 100(b)." (R. 883; Appendix p. 10.) (Italics ours.)

• • • • • • • •

"The independent air line under Reading is used at pressures far above those contemplated by Shelburne and the other devices, though within the physical capability of those devices. Again, the use of this excessive pressure is to be desired in applying liquid cement and to be avoided in applying paint." (R. 884; Appendix p. 11.)

Section 112 of Title 35 U.S.C. requires that the specifications contain a sufficient description of the invention to enable one skilled in the art to make and use the invention and, in addition, requires that the claims must par-

ticularly point out and distinctly claim the invention. This defense is not a technical defense and has frequently been upheld by the Courts. The necessity of a proper disclosure and a proper claiming of the invention, to enable the public to make and use the invention after the monopoly has expired, is one of the major considerations for the issuance of a patent to an inventor. The metes and bounds of the patent must be set forth, in order that those skilled in the art may know what monopoly is asserted, and to enable them to use other processes, structures and devices not covered by said monopoly.

Schriber-Schroth Co. v. Cleveland Trust Co., 83 L. Ed. 34, 39, 305 U.S. 46;

General Electric Co. v. Wabash Appliance Corp., 82 L. Ed. 1402, 1405, 304 U.S. 364;

United Carbon Co. v. Binney & Smith Co., 87 L. Ed. 232, 237, 317 U.S. 228.

No contention has ever been made, nor is there any finding or statement by either the District Court or Court of Appeals, that the language employed in the claims of said Patent No. 2,721,148 is unintelligible or ambiguous. The claims are free from ambiguity. What, therefore, are the metes and bounds of said claims with reference to this novel feature of the pressure employed in the independent air line—the very heart of the invention?

The process defined in claim 1 is as follows:

"A method of applying rubber cement which includes an inflammable solvent,

comprising forming an emulsion of air in the cement in a dispersion zone by introducing said air under pressure into a substantial body of cement

maintained in said zone at superatmospheric pressure

continuously withdrawing a stream of the emulsion from the dispersion zone,

forming an independent stream of air,

continuously mixing the emulsion stream with said independent stream of air in a mixing zone,

and continuously directing the resulting mixture of emulsion and air onto a surface to form a thin uniform coating of rubber cement thereon."
(Italics ours.)

In analyzing this process with respect to the independent air stream, we find that the step of "forming an independent stream of air" defined by claim 1 does not in any way limit the pressure to be employed in said independent stream of air. There is no limitation whatever on the pressure of air in this "independent stream of air". Any pressure from 0 to infinity is included in the process of this claim. Certainly, this claim overclaims the invention. We submit that, there being no limitation whatsoever respecting the pressure to be employed in the independent air line in the process defined in claim 1, said claim does not particularly point out and distinctly claim the invention of the patent.

The Court of Appeals states that this deficiency can be remedied by reference to the specification which would limit the pressure in the independent air line to 150 to 200 pounds. However, the language employed in claim 1 is free from ambiguity, and under the doctrine of this Court expressed in *Graver Tank & Mfg. Co. v. Linde Air*

Products Co., supra, there is no justification for referring to the specification to limit the claim. Therefore, as a matter of law, said claim 1 is invalid.

The language of claim 2 respecting the independent stream of air is also representative of claims 3 and 4. We will, therefore, analyze the process of said claim 2 as representative of said claims 2, 3 and 4.

Claim 2 calls for:

"A method of applying rubber cement which includes an inflammable solvent,

comprising introducing a measured amount of the cement into a dispersion zone,

introducing a quantity of air at superatmospheric pressure into the cement under emulsion conditions to form a stable dispersion of gas and cement under pressure,

continuously withdrawing a stream of the emulsion from the dispersion zone,

continuously withdrawing a separate stream of air from a source of air under superatmospheric pressure,

continuously mixing the streams of emulsion and said separate stream of air in a mixing zone to form a spray of emulsion suspended in air,

and continuously directing the resulting spray onto a surface to form a thin uniform coating of rubber cement thereon."

(Italics ours.)

Each of these claims 2, 3 and 4 calls only for the air of the independent stream to be "from a source of air under

superatmospheric pressure". What does "superatmospheric pressure" mean? Atmospheric pressure at sea level is 14.6974 pounds per square inch. A pressure, therefore, of 15 pounds at sea level would be superatmospheric pressure. The language of said claims 2, 3 and 4 encompasses a pressure in the independent stream of air of from approximately 15 pounds per square inch to infinity. Again, claims 2, 3 and 4 overclaim the invention. The language of these claims is free from ambiguity and, therefore, they should of themselves "particularly point out and distinctly claim" the invention. Due to the fact that each of these claims is free from ambiguity, there is no justification for reference to the specification to limit the invention. Therefore, as a matter of law, each of said claims 2, 3 and 4 is invalid.

Notwithstanding the contention that the claims overclaim the invention and that they are free from ambiguity, the Court of Appeals, in affirming the validity of said claims, said:

> "In our view, however, the stated claims of the patent read in the light of the specifications are legally sufficient within the meaning of 35 U.S.C.A., Section 112." (R. 885; Appendix p. 12.)

This ruling is completely opposed to and ignores the interpretation and application of Section 112 of 35 U.S.C.A. in *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, supra, where this Court expressed the following doctrine respecting the application of said Section 112:

> "The difference between the District Court and the Court of Appeals as to these findings comes to

this: The trial court looked at claims 24 and 26 alone and declined to interpret the terms 'silicates' and 'metallic silicates' therein as being limited or qualified by specifications to mean only the nine metallic silicates which had been proved operative. The District Court considered that the claims therefore were too broad and comprehended more than the invention. The Court of Appeals considered that because there was nothing in the record to show that the applicants for the patent intended by these claims to assert a monopoly broader than nine metallic silicates named in the specifications, the court should have construed the claims as thus narrowed and limited by the specifications.

The statute makes provision for specification separately from the claims and requires that the latter 'shall particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention or discovery.' R.S. § 4888, as amended, 35 U.S.C. § 33, 35 U.S.C.A. § 33. It would accomplish little to require that claims be separately written if they are not to be separately read. While vain repetition is no more to be encouraged in patents than in other documents, and claims like other statements may incorporate other matter by reference, their text must be sufficient to 'particularly point out and distinctly claim' an identifiable invention or discovery. We have frequently held that it is the claim which measures the grant to the patentee. See, for example, Milcor Steel Co. v. George A. Fuller Co., 316 U.S. 143, 145, 62 S. Ct. 969, 970, 86 L. Ed. 1332; General Electric Co. v. Wabash Appliance Corp., 304 U.S. 364, 369, 58 S. Ct. 899, 901, 82 L. Ed. 1402; Altoona Publix Theatres v. American Tri-Ergon Corp., 294 U.S. 477, 487, 55 S. Ct. 455, 459, 79 L. Ed. 1005. *While the cases more often have dealt with*

> *efforts to resort to specifications to expand claims, it is clear that the latter fail equally to perform their function as a measure of the grant when they overclaim the invention. When they do so to the point of invalidity and are free from ambiguity which might justify resort to the specifications, we agree with the District Court that they are not to be saved because the latter are less inclusive.* Cf. General Electric Co. v. Wabash Appliance Corp., 304 U.S. 364, 373, 374, 58 S. Ct. 899, 903, 904, 82 L. Ed. 1402; see McClain v. Ortmayer, 141 U.S. 419, 424, 425, 12 S. Ct. 76, 77, 78, 35 L. Ed. 800; Cimiotti Unhairing Co. v. American Fur Refining Co., 198 U.S. 399, 410, 25 S. Ct. 697, 702, 49 L. Ed. 1100." (Italics ours.)

In applying this doctrine to the instant case, we find, first, that the claims of patent No. 2,721,148 are free from ambiguity; second, that the claims overclaim the invention to the point of invalidity; and third, that said claims fail to perform their function as a measure of the grant to the patentee.

We submit that said claims are fatally indefinite and that the Court of Appeals for the Ninth Circuit should not be permitted to ignore the doctrine of this Court expressed in *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, supra. We urge that the decision here involved erroneously construes and applies 35 U.S.C. Section 112, in direct conflict with said *Graver Tank & Mfg. Co.* case and applicable decisions of other Courts of Appeals.

CONCLUSION.

We respectfully urge that in the public interest and in the interest of uniformity this Court should review the Judgment here involved.

May 7, 1959.

Respectfully submitted,

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(Appendix Follows.)

Appendix

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

ELRICK RIM COMPANY, a co-partnership consisting of M. C. ELRICK and M. B. CHAMPLIN, *Appellant*,

vs.

READING TIRE MACHINERY CO., INC., a corporation, and RALPH R. READING, an individual, *Appellees*.

No. 15,986
Mar. 4, 1959

Appeal from the United States District Court for the Southern District of California
Central Division

Before: Barnes, Hamley, and Jertberg, Circuit Judges.

HAMLEY, Circuit Judge:

Seeking to defend its method of applying liquid rubber cement on tires, Elrick Rim Company brought this action for a declaratory judgment.[1] The company sought a judicial declaration that a patent owned by Ralph R. Reading, covering a process for the application of liquid rubber cement, is invalid and not infringed by Elrick Rim Company. It also sought damages for unfair competition.

The defendants are Reading, to whom the patent (No. 2,721,148) was issued on October 18, 1955, and his exclusive licensee, Reading Tire Machinery Co., Inc. They denied the principal allegations of the complaint. They also counterclaimed for a judicial declaration that the patent is valid and infringed, and

[1] At the time the suit was filed Elrick Rim Company was a partnership consisting of M. C. Elrick and M. B. Champlin. A California corporation having the same name, organized after this action was begun, is the successor in interest to the partnership.

for treble damages for infringement. In addition defendants sought an award of reasonable attorney's fees.

After a trial, a judgment favorable to defendants was entered. Plaintiff was denied all relief. The patent was declared to be valid and infringed by plaintiff. Defendants were awarded single damages in an amount to be ascertained by a master. They were also awarded attorney's fees in the amount of $7,500.

Plaintiff appeals,[2] contending that numerous findings of fact are clearly erroneous and that basic principles of patent law were disregarded or misapplied.

The retreading of an automobile tire is accomplished by attaching tread rubber to a tire carcass through the application of heat. The first step in doing this is to buff thoroughly the surface of the tire carcass. It is then necessary to apply an adhesive coating to the buffed surface before placing the tread rubber.

At the inception of the tire retreading industry and for many years thereafter this adhesive coating consisted of a thick, wet layer of rubber cement dissolved in an inflammable solvent having a petroleum base. A stippling brush was used in applying this coating. There was considerable difference of opinion in the industry as to the necessity for applying more than one such layer.

The viscosity and wetness as well as the thickness of the coating presented problems. It was necessary to remove the coated tire to a place of storage having adequate ventilation so that it could dry under fireproof conditions. It was also necessary that the drying room be dustproof. If particles of dust were permitted to settle on the surface of the drying cement, defective adhesion of the tread rubber to the tire would later result.

At times of high humidity droplets of water vapor would condense or settle upon the surface of the coating. This sometimes resulted in tire failures caused by the creation of vapor pockets under the tread. It was therefore necessary to suspend the described coating operations during periods of high humidity.

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[2]As it may do under 28 U.S.C.A., § 1292(a)(1), although an accounting remains to be had.

The application of this thick coating by the use of a stippling brush frequently forced the cement into surface irregularities and defects such as nail holes and cuts. Since rubber cement dries from the outside, the result often was that the inner wet cement formed gaseous pockets when heat was later applied during the retreading process. Defects of this kind, known as "tire blow holes," were a common hazard and sometimes resulted in the complete loss of the tread while the tire was in use on the highway.

In this prior practice the evaporation of the solvents in which the rubber cement was dissolved created a serious health hazard to the operator. The prior practice was also time consuming with respect to both the application of the coating and the drying period, which required from several hours to several days.

Use of the stippling-brush method of applying the adhesive coating made it necessary to stir the mixture of cement and solvent continuously. If this was not done, precipitation occurred and there was a consequent sludging and uneven application of the cement.

From about December 7, 1951, to December 1953, Reading worked almost continuously to perfect a method of applying an adequate adhesive coating to a tire carcass in a manner which would overcome the difficulties of the stippling-brush method. The central idea which Reading pursued was that of spraying on the liquid cement with a device similar to a conventional paint sprayer.

During this period Reading experimented with and tested numerous variations of the device, different combinations of air pressure within the container and in the bypass line leading to the nozzle, and diverse ratios of cement to solvent within the container. Most of the tires processed during the course of these experiments and tests proved satisfactory and were sold in the regular course of business. However, the number of retread failures and inability to completely overcome the major difficulties of the former art led Reading to continue his efforts.

Two features dominate the process as ultimately developed by Reading. One is so-called "emulsification" of air bubbles with the rubber cement in solution. The other is the forcing of this

emulsion through the nozzle of the spraying device at a high pressure.

Emulsification,[3] as Reading conceived it, is the entrainment of air bubbles in the liquid cement. The result is a stable mixture of cement solids and solvent. The need for constant stirring is avoided, and there is no precipitation or settling of cement solids as long as the container is kept under pressure.

It was discovered that the sprayed emulsion had less tendency to "cobweb" than where no emulsion effect was obtained. The elimination of "cobwebbing" made it possible to secure a more thorough and even coating of the tire. It was also observed that there is a greater degree of tackiness to cement which has been emulsified by means of the Reading process.

This process, as finally developed, teaches that the emulsifying effect may be produced by introducing compressed air into the container of the spray device through pinholes in an air inlet pipe near the bottom of the container. The desired effect can be obtained by an air pressure as low as five pounds per square inch. Reading believed, however, that the best results would be obtained by an application of forty pounds per square inch for several seconds, and then reducing the pressure to about fifteen pounds.

The high pressure in the independent air line, as taught by Reading, reaches a magnitude of from one hundred fifty to two hundred pounds per square inch. This makes possible the application of an exceedingly thin coating of rubber cement which dries quickly, thereby saving time and avoiding the dust, moisture, and health hazards associated with former methods. The utilization of high air pressure in the bypass line also aids in overcoming the "cobwebbing" effect to which reference has been made. In addition the high air pressure utilized in the Reading process causes the mixture to attain and retain an air volume

[3]An emulsion is the dispersion of one liquid in another. The witnesses and the trial court recognized that the entrainment of air bubbles in the cement and solvent as accomplished by the Reading process did not result in emulsion in the technical sense. Since, however, this is the term employed in the Reading patent to describe what his process accomplished, it will be convenient to use that terminology in this opinion.

above the flammable limits of the solvent. The need of extreme care to avoid the danger of fire or explosion is thus overcome.

There are at least three paint-spraying devices, patented prior to Reading, which with certain adjustments or minor changes could have been utilized to carry out the Reading process. One of these is the Shelburne apparatus, patent No. 1,710,435. Another is the Gradolph device, patent No. 1,318,863. The third is the McLean sprayer, patent No. 1,395,965. These three patents claim devices and not methods. In each case the principal purpose of such device is to spray paint; but other liquids are also mentioned.[4]

In paint spraying the application of air pressure in the independent air line in the 150 to 200-pound range is unnecessary and in fact undesirable. Likewise, there is no advantage in obtaining an emulsion effect where paint is to be sprayed. In these two particulars Reading teaches a process not contemplated by Shelburne, Gradolph or McLean.

In January 1953, which was towards the end of Reading's experimental period, one W. S. Cahill developed a method of spraying rubber cement on tire carcasses. After a little over a month of testing, Cahill began the manufacture and sale of a spray device to be used for this purpose. He sold five such appliances between February 7 and July 23, 1953. One D. S. Hartman assisted Cahill at the outset, and was later given Cahill's original machine. Hartman used this machine in the regular course of his tire retreading business from February 7 to July 1, 1953, during which period he processed 4,658 tires.

The Cahill method utilizes a paint-spray type of device but without provision for agitation or emulsion of the liquid in the tank. While compressed air is forced into the tank, this is done at a point above the liquid and only for the purpose of forcing the liquid into the spray gun.

Cahill employs an independent air line connected to the spray gun, utilized, as in the case of Reading, to atomize the liquid cement as it is applied. The patent issued to Cahill does not dis-

[4] Shelburne mentions "paints, varnishes, enamels, or other liquid coating compositions. . . ." McLean refers to "paints, washes or chemicals. . . ."

close any particular air pressure, although references are made to the "high pressure" air supply. In his recommendations to others using his device, Cahill advised the application of forty pounds pressure in the independent air line and five pounds in the tank.

The Cahill process contemplates that brushes will be applied to the cement after it is coated on the tire. Most of the appliances manufactured by Cahill were actually without brushes. Hartman, however, continued to use the brushes on his Cahill device and considered them to be a valuable part of the machine. This feature of Cahill has no counterpart in Reading.

The Cahill method of spraying liquid cement has a tendency to cause "cobwebbing" of the cement on the tire. The result is that tiny filaments and strands of dried cement would float in the atmosphere, creating a health, fire, and dust hazard. As before noted, this "cobwebbing" effect was avoided in the Reading process.

Reading made the first public disclosure of his concept on January 23, 1952. Cahill applied for his patent on June 17, 1953. Reading applied for his patent on July 23, 1954. The Reading patent was issued first—on October 18, 1955. The Cahill patent was issued on August 7, 1956.

The application for the Reading patent as originally filed was intended to cover both the device and the process. Thereafter the application was divided and the patent issued on October 18, 1955, unlike Cahill, is on a process and not an apparatus. The part of the Reading application pertaining to an apparatus is still pending in the patent office.

Appellant Elrick Rim Company has been in the tire-retreading machinery business since 1951. M. C. Elrick, a member of the original partnership, first met appellee Reading at a tire dealers' convention in 1954. Before meeting Reading, however, Elrick had heard of the Reading method and believed that it was excellent. When the two men met, Elrick asked Reading if any jobbing arrangement was available for northern California. Reading referred Elrick to Reading's northern California representative who informed Elrick that no distributorship was available.

Several days after the convention Elrick entered into a contract with an Oakland manufacturer for the production of a spray device. Before doing so Elrick had made an examination of the ultimate results of the Reading device and method, and had concluded that Reading was not entitled to patent protection.

The Elrick device as thereafter manufactured for and marketed by him utilized a conventional pressure paint pot. In use, the cement and solvent are put in the tank, which is then closed, and air compressed to ten pounds per square inch is allowed to bubble through the liquid for a few minutes. The liquid cement is then released by pressing the trigger of the spray gun. An independent source of compressed air mixes with the cement at the nozzle as in any spray device.

The instructions which Elrick issued to purchasers of his device describe in some detail the operating method to be employed.[5]

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[5]These operating instructions read as follows:

"To Operate

"1. Wipe tank with clean rag and pour 4 quarts of rubber solvent and 2 quarts of rubber cement in tank. This proportion may vary as some cements are thicker than others.

"2. Adjust air pressure regulator to 10# as shown on air gauge. Do not use over 10#- as spray gun has been adjusted for this pressure.

"3. Mix cement thoroughly by air agitation. This is done by opening air release valve located at rear of cover (not the safety valve). Allow air to pass through tank for about 3 minutes for complete mixing. If sprayer is not used for several hours, agitate before using.

"4. Apply cement to slowly rotating tire with spray gun about 8" from surface. Usually one rotation for each shoulder and center is necessary for proper coverage. When proper amount of cement is used, it is not visible on tire but tread rubber (camelback) adheres to casing and should be applied immediately. If tire is wet, too much cement is being used and drying is necessary.

"General

"Spray gun has been properly adjusted. Read instructions in box before trying to make any changes.

"It is not necessary to clean spray gun. Leave it connected at all times so that cement in hose and gun does not dry. If gun does

Elrick's instructions for air pressure in the independent line are the same as in the specifications of the Reading patent.[6] Elrick's instructions for air pressure within the liquid cement receptacle, however, are for ten pounds per square inch, as compared to Reading's recommended initial pressure of forty pounds thereafter reduced to fifteen pounds. The Elrick instructions do not mention "emulsion," but use the term "air agitation."

The Elrick process, however, actually does produce an "emulsion," as Reading uses the term, though it may not be accomplished as quickly or as completely as by Reading's process. In view of this fact and the similarity of methods as to atomization, the Elrick practice is equivalent to the method disclosed by Reading. Whether Elrick's action in adopting this equivalent practice was willful, deliberate, and intentional is a fact question which will be dealt with at a later point in this opinion.

The facts summarized above incorporate the substance of the findings of fact,[7] but with considerable amplification. Appellant challenges many of the individual findings of fact as clearly erroneous.

There are instances in these findings of fact, as with those in almost any case, where an individual finding, read alone, is incomplete or inaccurate. The limitations of language are such that it is often impossible to state a fact with all of its attendant qualifications and exceptions in a single sentence or

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not operate properly, contact your local Binks dealer as listed in Yellow Pages of telephone book.

"Full air pressure of 150# to 200# at air cleaner inlet is necessary for proper atomization and drying of cement."

[6]The Reading specifications state: "The pressure of the compressed air fed to spray gun is set at about 150 to 200 pounds per square inch. . . ."

[7]Certain of the statements contained in the findings of fact are more properly to be considered conclusions of law, and have therefore not been referred to in the above summary. What the prior art was and what the patentee did to improve upon it are questions of fact. Whether what the patentee did is properly to be classified as an invention is a question of law. See Cee-Bee Chemical Co., Inc. v. Delco Chemicals, Inc., 9 Cir., ... F.2d .....; William T. Alvarado Sales Co. v. Rubaloff, 9 Cir., ... F.2d ....., footnote 6.

even a single paragraph of reasonable length. The accuracy and completeness of findings of fact must therefore be judged by reading them as a whole and not by considering individual findings in isolation.

The findings of fact here in question are comprehensive, consisting of fifteen paragraphs. They are supplemented by an eight-page memorandum decision. Although no attempt was made therein to deal with each subissue or byway explored during the trial, we find them to be adequate.

We also find them to be supported by substantial evidence. This is demonstrated by the details we have added in the above summary of the facts. These details are based upon substantial evidence. Where the evidence has been found to be in dispute, we have adopted that version which is consonant with the findings of the trial court. This is the only proper course since it is not our function to make findings or to test the trial court's findings through a weighing of the evidence.[8]

The findings of fact are not clearly erroneous.

The trial court concluded from these facts that in the conception and perfection of his process Reading exercised invention and exceeded the skill of the art. Appellant attacks this conclusion. It is argued that, as compared to the prior paint-spray art taught by the Shelburne patent, Reading cannot be regarded as the invention or discovery of a new and useful process. The same comparison is drawn and assertion made concerning the prior liquid cement spray art practiced by Cahill and Hartman.

It has already been noted that the Reading process can be utilized by means of the Shelburne, Gradolph, or McLean device, providing certain adjustments or changes are made. This fact alone, however, is not sufficient to rule out patentability. The term "process" is defined in the patent law as including "a new use of a known process, machine, manufacture, composition of matter, or material." 35 U.S.C.A., § 100(b). A different use of a known substance, machine, or process is not "new" with-

[8]Perhaps the point concerning which there is the most conflict in the evidence is with regard to whether the Elrick process produces an emulsion.

in the meaning of this statute if it is merely analogous or cognate to the uses theretofore made.[9]

The trial court concluded that the use which Reading made of the known paint spraying devices was not analogous to the uses for which they were originally designed. The court based this conclusion on its findings of fact that Reading was the first to use excess air pressure in the independent air line and to obtain emulsion within the tank of liquid, both of these techniques being undesirable in the case of spray painting. In our view these two variances are sufficient to warrant the conclusion that Reading teaches a nonanalogous art and is therefore a "new" use of a known machine within the meaning of § 100(b).

It is true, as appellant argues, that in numerous decisions the rule has been announced that the mere function of a machine is not patentable.[10] But this rule does not apply in the case of a process patent involving the use of a known machine where such use is found to be "new" within the meaning of § 100(b), provided the other conditions of patentability are satisfied.[11]

Appellant is quite right, however, in contending that patentability is not established by showing that the process is new and useful. It is made clear in 35 U.S.C.A., § 101, that to be patentable the new and useful process must be the result of invention or discovery. The same view has been expressed with regard to the patent law as it existed prior to enactment of the new patent act on July 19, 1952.[12]

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[9]Fluor Corporation Ltd. v. Gulf Interstate Gas Co., 5 Cir., 259 F.2d 405, 408; B. & M. Corp. v. Koolvent Aluminum Awning Corp. of Ind., 7 Cir., 257 F.2d 264, 267; Application of Wynne, C.C.P.A., 255 F.2d 956, 959; Application of Ducci, C.C.P.A., 225 F.2d 683, 688.

[10]See, for example, Boyden Power Brake Co. v. Westinghouse, 170 U. S. 537; Miller v. Zahariaa, 7 Cir., 168 F.2d 1; Interstate Folding Box Co. v. Empire Box Corp., 7 Cir., 68 F.2d 500; Demeo v. Doughnut Machine Corp., 4 Cir., 62 F.2d 23.

[11]See Commentary on the New Patent Act, P. J. Federico, Examiner-in-Chief, U. S. Patent Office, 35 U.S.C.A., page 1, at pages 16-17; Application of Wynne, supra.

[12]See Palmer v. Kaye, 9 Cir., 185 F.2d 330, 332; R. G. Le Tourneau, Inc. v. Gar Wood Industries, Inc., 9 Cir., 151 F.2d 432, 434.

Invention or discovery is not present where the new use of a known apparatus is the product of the exercise of ordinary professional skill. Pierce v. Muehleisen, 9 Cir., 226 F.2d 200, 204. There must be ingenuity over and above mechanical skill. Schick Service Inc. v. Jones, 9 Cir., 173 F.2d 969, 974.

Bearing these principles in mind, we think that the trial court was warranted in concluding that Reading's process represents invention as compared to the prior paint-spray and liquid-cement-spray art. True, the Reading process makes use of the essential features of Shelburne and the other devices which have been named. It is a new use, however, not only in the sense that the device is used to spray a nonpaint material, but also because essential elements of the device are employed in a manner different from that originally intended.

The compressed air inlet tube within the receptacle is used not alone to agitate the liquid (as in the case of paint) but also to emulsify it. Such emulsification is peculiarly desirable in coating tires with liquid cement and distinctly undesirable in applying ordinary paint. The independent air line under Reading is used at pressures far above those contemplated by Shelburne and the other devices, though within the physical capability of those devices. Again, the use of this excessive pressure is to be desired in applying liquid cement and to be avoided in applying paint.

Unlike the prior patents such as Shelburne, Cahill's apparatus and method (also utilized by Hartman) is intended for use in spraying liquid cement. But Cahill teaches neither emulsification nor atomization achieved at excessive pressures. The result was, as the trial court found, that Cahill did not overcome the difficulties which had long beset the tire retreading industry.

After a long period of experiments and tests, varying his technique sometimes by plan and sometimes by accident, Reading finally hit upon a way to overcome almost all of these problems. The need for such a development was urgent. Yet, despite the efforts of trained mechanics in this industry, no one had found the answer until Reading came along.

It is true, as appellant points out, that any mechanic can install an air inlet tube or regulate air pressure. But these steps

were not taken in the manner and for the purpose contemplated by the Reading method until he discovered an advantage in doing so. When they were taken, new, unexpected, and extremely useful results were achieved.

Chance was a factor in Reading's success, as it often is in the unfoldment of an invention. But the prime credit goes to careful thought, painstaking research, experimentation and testing, and what we consider more than average patience, determination, and ingenuity. In our opinion the trial court correctly concluded that Reading's conception evidences the exercise of the inventive faculty.

Appellant challenges the legal sufficiency of the specific claims set out in Reading's patent. In our view, however, the stated claims of the patent read in the light of the patent specifications are legally sufficient within the meaning of 35 U.S.C.A., § 112.

The facts summarized earlier in this opinion indicate to us that Reading was not anticipated by the prior art. The trial court so concluded, and also held that the patent is not invalid for prior use or sale or on account of any estoppel. We agree.

The facts concerning Elrick's asserted infringement have been stated herein at some length. The trial court's ultimate finding that Elrick practiced a method equivalent to that disclosed by Reading has already been sustained. The conclusion of law drawn therefrom by the trial court, to the effect that Elrick infringes each of the claims of Reading, necessarily follows and is here upheld.

The trial court further found and concluded that Elrick's infringement was "willful, deliberate and intentional."[13] Based

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[13]The complete finding of fact on this point reads as follows:

"The plaintiff's and cross-defendants' infringement was willful, deliberate and intentional and continued after notice in writing. The plaintiff and cross-defendants obtained knowledge of the status and nature of the Reading process and of the status of the application for the patent in suit while representing themselves to Reading as persons recognizing the patent rights of the defendants and counter-plaintiffs and seeking rights as licensees thereunder, and armed with such knowledge commenced immediately their infringing

on this finding, the trial court awarded attorney's fees to appellees in an amount later fixed at $7,500. Appellant argues that the evidence does not support this finding and the resulting award of attorney's fees.

There is substantial evidence to support the finding that Elrick's adoption of a process substantially equivalent to that of Reading's was willful, deliberate, and intentional. But the purport of the questioned finding goes beyond this, for it refers to "infringement." There could not be infringement unless Reading's process met all the conditions of patentability. The finding of fact, then, is to the effect that, having reasonable grounds for believing that Reading's process was patentable, Elrick willfully, deliberately, and intentionally set out to infringe that patent.

We do not believe that there is substantial evidence to support such a finding. Elrick certainly did not concede any such motivation. On the contrary, he testified that before entering into competition he made an examination of the ultimate results of the Reading device and method, and concluded that Reading was not entitled to patent protection.

Considered in the hindsight of this opinion, that was an erroneous conclusion. But it was not a wholly unreasonable or unfounded conclusion, since the question of patent validity, in our view, is close on both the facts and the law. Having arrived at that conclusion, Elrick proceeded in the only way that he could to test the matter—he engaged in competition, and when resisted by Reading instituted this action for a declaratory judgment.

The finding of fact as to intentional infringement is therefore clearly erroneous.

Under 35 U.S.C.A., § 285, an award of reasonable attorney's fees may be made to the prevailing party "in exceptional cases." Having concluded that the finding as to intentional infringement

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actions. The instant action was brought by the plaintiff and counter-defendants as a part of their willful, deliberate and intentional infringement to defeat the rights of the defendants and counter-plaintiffs and to force a free license on pain of the threatened immediate bringing of the instant action and said acts of the plaintiff and counter-defendants were in bad faith."

is erroneous, it is our view that there is nothing else to categorize this as an "exceptional" case warranting the imposition of attorney's fees. See Park-In Theatres v. Perkins, 9 Cir., 190 F.2d 137, 142.

The judgment is modified by eliminating therefrom the award of attorney's fees to appellees. In all other respects the judgment is affirmed. The parties shall bear their respective costs on this appeal.

(Endorsed:) Opinion. Filed Mar. 4, 1959.

Paul P. O'Brien, Clerk.

Appendix

No. 15,986

United States Court of Appeals for the Ninth Circuit

ELRICK RIM COMPANY, etc.,
Appellant,

vs.

READING TIRE MACHINERY CO., INC., etc., et al.,
Appellees.

JUDGMENT

Appeal from the United States District Court for the Southern District of California, Central Division.

This cause came on to be heard on the Transcript of the Record from the United States District Court for the Southern District of California, Central Division, and was duly submitted.

On consideration whereof, it is now here ordered and adjudged by this Court, that the judgment of the said District Court in this cause be, and hereby is, modified by eliminating therefrom the award of attorney's fees to appellees. In all other respects the judgment is affirmed. The parties shall bear their respective costs on this appeal.

(Endorsed) Judgment. Filed and entered March 4, 1959.
Paul P. O'Brien, Clerk.

No. 15,986

United States Court of Appeals
for the Ninth Circuit

Excerpt from Proceedings of Monday, April 6, 1959.

Before: BARNES, HAMLEY and JERTBERG, Circuit Judges.

ORDER DENYING PETITION FOR REHEARING

On consideration thereof, and by direction of the Court, IT IS ORDERED that the petition of Appellant, filed *March 26, 1959*, and within time allowed therefor by rule of court for a rehearing of the above cause be, and hereby is denied.

CERTIFICATE OF SERVICE

Service of this Petition has been made upon RALPH R. READING and READING TIRE MACHINERY CO., INC., by mailing a copy thereof by regular United States mail, with postage prepaid, to their attorney, Mr. Albert M. Herzig, Herzig and Jessup, 757 West Seventh Street, Los Angeles 17, California, this 7th day of May, 1959.

JACK E. HURSH,
Attorney for Petitioner.